

SECTION 8: SUBDIVISION REQUIREMENTS

SECTION 8.01 GENERAL POLICIES

(a) Conformance to Plans.

(1) Public Improvements. Proposed public improvements serving new development shall conform to and be properly related to the public facilities elements of the City's adopted Comprehensive Plan, other adopted master plans for public facilities and services, and applicable capital improvements plans, and shall at a minimum meet the service levels specified in such plans.

(2) All Plats within the City and its ETJ, and corresponding Construction Plans, shall provide for thoroughfares as shown in the City's adopted *Comprehensive Plan*. The alignment and right-of-way width of all proposed thoroughfares shall be in general conformance with the City's *Comprehensive Plan*. Minor adjustments to thoroughfare alignments may be allowed without amending the *Comprehensive Plan* if the Director of Development Services believes the new alignment meets the spirit and intent of the *Comprehensive Plan* and will not compromise public safety or traffic efficiency. The design and construction of all proposed thoroughfares shall be in conformance with the City's *Thoroughfare and Circulation Design Requirements* and *Engineering Design Standards and Construction Details*, and shall be subject to approval by the Director of Engineering Services. Such approvals shall be required prior to any Plat approval.

Comprehensive Plan Amendment. If a significantly different roadway alignment or type (from what is shown on the *Comprehensive Plan*) is proposed, then the *Comprehensive Plan* shall be amended prior to any Plat approval. Submission of a Traffic Impact Analysis (TIA) of the proposed amendment by the developer may be required if the Director of Development Services and the Director of Engineering Services determine that such an analysis is necessary to fully assess the impact of the proposal upon the City's overall thoroughfare network.

(3) Water and Wastewater Plans. The design and construction of the water system and wastewater system to serve the development shall be in conformance with the City's master plans for water and wastewater facilities, and with the *Engineering Design Standards and Construction Details*, and shall be subject to approval by the Director of Engineering Services prior to approval of the Construction Plans and the Final Plat.

(4) Storm Drainage Standards. The design and construction of the storm drainage system to serve the development shall be in conformance with but not limited to the City's master plans for storm water drainage, with the City's Storm Drainage Ordinance, and with the *Engineering Design Standards and Construction Details*, and shall be subject to approval by the Director of Engineering Services prior to approval of the Construction Plans and the Final Plat.

(b) **Adequate Public Facilities.**

(1) Adequate Services for Areas Proposed for Development. Land proposed for development in the City and in the City's ETJ shall be served adequately by essential public facilities and services, including but not limited to water distribution, wastewater collection and treatment, roadways, pedestrian circulation, storm drainage conveyance, and park and recreational facilities. Land shall not be approved for platting or development until adequate public facilities necessary to serve the development exist or provisions have been made for the facilities, whether the facilities are to be located within the property being developed or offsite.

a. Street Access. A Plat will not be approved unless all of the proposed lots have safe and reliable street access for daily use and emergency purposes.

1. A Plat will not be approved unless all of the proposed lots have direct access to an improved public street (or a public street that will be improved during construction of the proposed development) to the City's minimum design and paving standards, or to an approved public way that is connected to an improved public street.
2. Except for lots which are provided access from an approved cul-de-sac, all lots within a development shall have at least two (2) means of access or approach. Where development phasing or constraints of the land prevent the provision of a second, separate means of access, the City may accept a temporary street connection provided that a second permanent access point can be reasonably anticipated with future development of adjacent properties.
3. For properties situated adjacent to an existing or planned median-divided thoroughfare, at least one (1) of the required access points shall occur at, or through access easement connection to, a median opening. (See Diagram 8.01-1)

b. Water. A Plat will not be approved unless all of the proposed lots are connected to a public water system which is capable of providing adequate water for health and emergency purposes.

1. Except for lots along an approved cul-de-sac, all lots shall be provided service connections from a looped water main providing water flow from two (2) directions or sources.
2. Water service shall be sufficient to meet the fire flow requirements of the proposed development, except where a suitable alternative means of fire protection is approved by the Fire Chief.
3. The City may require the phasing of development and/or improvements to the water system to ensure adequate fire protection.

c. Wastewater. A Plat will not be approved unless all of the proposed lots are served by an approved means of wastewater collection and treatment.

1. The projected wastewater discharge of a proposed development shall not exceed the proposed capacity of the wastewater system.

2. The City may require the phasing of development and/or improvements to the sanitary sewer system so as to maintain adequate wastewater capacity.
 - d. Storm Drainage. Increased storm water runoff attributable to new development shall not cause impacts to adjoining, upstream or downstream properties. Impacts are defined as an increase in runoff between pre and post development. Where the projected runoff from a new development exceeds runoff from pre development conditions, the City may require the phasing of development, the use of control methods such as retention or detention, obtaining off-site drainage easements, and/or the construction of off-site drainage improvements as means of mitigation.
- (2) Property Owner's Responsibilities. The property owner shall be responsible for, but not limited to, the following:
- a. Dedication and Construction of Improvements. The property owner shall dedicate all rights-of-way and easements for, and shall construct and extend, all necessary on-site and off-site public improvements for water distribution, wastewater collection and treatment, streets, storm drainage conveyance, and other improvements that are necessary to adequately serve each phase of a proposed development at service levels that are consistent with the City's applicable master facilities plans and construction design standards.
 - b. Abutting Substandard Streets. Where a substandard street abuts or traverses a proposed development, the City may require the property owner to dedicate additional right-of-way and to improve the street to the City's current design and construction standards as set forth in the *Thoroughfare and Circulation Design Requirements*, in the *Engineering Design Standards and Construction Details*, and in the *Comprehensive Plan*. Such requirements to improve the substandard street to the City's current standards shall only be imposed following careful review of factors including, but not limited to:
 1. The impact of the new development on the street;
 2. The timing of the development in relation to need for the street; and
 3. The likelihood that adjoining property will develop in a timely manner.

In the case of frontage or service roads for state or federally designated highways, the entire abutting right-of-way shall be dedicated and improved to that agency's applicable construction design standards if such improvement is approved by the agency. (Also refer to Section 8.04 of this Ordinance, and the City's Impact Fee Ordinance.)

- c. Facilities Impact Studies. The City may require that a developer prepare a comprehensive Traffic Impact Analysis (TIA), flood or drainage study or downstream assesment, or other facilities impact study(ies) in order to assist the City in determining whether a proposed development will be supported with adequate levels of public facilities and services concurrent with the demand for the facilities created by the development. The study(ies) shall identify, at a minimum:



1. The adequacy and capacities of existing facilities;
2. The nature and extent of any current deficiencies; and
3. The public improvements that will be needed to meet adequate levels of service assuming development at the intensity proposed in the application.

The study(ies) shall be subject to approval by the Director of Engineering Services prior to approval of the Preliminary Plat and the Construction Plans. The City also may require, at the time of approval of a subsequent application (e.g., Final Plat), an update of a facilities impact study(ies) approved in connection with a prior application (e.g., Preliminary Plat).

- d. Future Extension of Public Facilities. The property owner shall make provisions for future expansion of the public facilities as needed to serve future developments, subject to the City's oversize participation policies, if applicable;
 - e. Operations and Maintenance of the Public Facilities. The property owner shall provide for all operations and maintenance of the public facilities, or shall provide proof that a separate entity will be responsible for the operations and maintenance of the facilities;
 - f. Fiscal Security. The property owner shall provide all fiscal security required for the construction of the public facilities;
 - g. Approvals from Utility Providers. The property owner shall obtain all necessary approvals from the applicable utility providers other than the City, and shall submit written verification of such approvals to the City with the Construction Plans; and
 - h. Compliance with Utility Providers. The property owner shall comply with all requirements of the utility providers, including the City and applicable drainage districts.
- (3) Rough Proportionality; Fair Share. There is a direct correlation between the increased demand on public facilities and systems that is created by a new development, and the City's requirements to dedicate rights-of-way and easements and to construct a fair and proportional share of public improvements that are necessary to offset such impacts such that new development does not negatively affect the City as a whole. The City desires that a new development project contribute its fair and proportional share of such costs.

SECTION 8.02 WATER & WASTEWATER REQUIREMENTS

(a) Water and Wastewater Basic Policy.

(1) Construction Requirements.

- a. All public water and wastewater mains shall be located in the frontage of the property along streets, or in easements adjacent to the development in order to provide service to adjacent property.
- b. Public water and/or wastewater mains shall not be located within a private street, drive or access easement unless a public utility easement is provided.
- c. The minimum easement width for water or wastewater mains shall be fifteen (15) feet, or as determined by the Director of Engineering Services. Where it is necessary for water and wastewater facilities to be located within the same easement, the easement shall be a minimum of twenty (20) feet in width, or as determined by the Director of Engineering Services.
- d. No portion of a structure (including, but not limited to, walls, foundations, porches/patios and porch/patio covers, canopies, roof extensions/overhangs, chimneys, fire flues, etc.) shall encroach over or into any easement, except that wall-attached window awnings, "bay" style windows, and roof eaves shall be allowed to encroach into an easement a maximum of twenty-four inches (24") upon approval of the Director of Engineering Services.
- e. A water or wastewater easement between two lots must fall entirely on a single lot.
- f. Easements shall be dedicated for exclusive use for water and wastewater facilities and shall be shown on the Final Plat for the specific purpose intended. When it is necessary for additional utilities to be placed within an easement, additional width shall be provided and the easement shall be labeled for its intended purpose on the Final Plat.
- g. When it is necessary to relocate or replace an existing water or sewer facility to accommodate a proposed subdivision, the developer is responsible for all costs associated with the relocation, except as agreed to by City Council for oversize participation.

- (2) Construction Plans. Plans for construction of all water and wastewater facilities required by these regulations shall be prepared in accordance with the requirements and specifications contained in the *Engineering Design Standards and Construction Details*, the regulations of the Texas Commission on Environmental Quality (TCEQ), National Sanitation Foundations (NSF), Texas Department of Insurance, Insurance Services Office, and the City's current adopted Fire Code, which are incorporated by reference and made a part hereof. Plans for the improvements must be prepared by a licensed engineer and accepted by the Director of Engineering Services.



- (3) Acquisition of Easements. The developer shall be responsible for the acquisition of all required off-site easements. If the developer is unable to acquire the necessary off-site easement, the City shall be provided with easement or right-of way survey documents and exhibits, documentation, including evidence of a reasonable offer made to the affected property owner. Upon receiving a written request for assistance, the City may, at its option, acquire these easements either through negotiations or through condemnation in appropriate situations. The developer shall reimburse the City for the costs of acquiring the necessary easements including but not limited to attorney fees, expert fees and title searches.

(b) Preliminary Utility Plan.

- (1) Concurrent with the submission of a preliminary plat, replat or minor plat, the developer shall submit a map or plan showing the location and size of water and wastewater mains, which will be required to provide adequate service and fire protection to the lots specified in the proposed plat. Plans and specifications for fire hydrant systems shall be submitted to the Fire Marshal for review prior to construction.
- (2) Plan Document. The plan shall be prepared as noted in the City's Development Application Handbook.
- (3) Coordination with other Utility Providers
 - a. *Preliminary Plat*. When the subdivision is located in an area served by a utility provider other than the City, the developer must provide a water system analysis.
 - b. *Minor Plat, Replat*. When a subdivision is located in an area served by a utility provider other than the City, the developer must provided a letter from the utility provider stating that facilities existing in the area to provide adequate domestic service and fire protection. If the City has reason to believe that there may be water supply or pressure concerns, a water system analysis may be required.
 - c. *Final Plat*. The final plat will not be filed with the County until a letter has been provided from the utility provider stating that they have accepted the plans for construction.

(c) Miscellaneous Requirements.

- (1) No building shall be constructed over an existing wastewater, lateral or water main unless approved in writing by the Director of Engineering Services and approved by the City Council.
- (2) Ownership and maintenance of water and wastewater mains and service connections shall be regulated as follows.
 - a. The title to all wastewater lines constructed, including wastewater service connections located in a right-of-way or dedicated easement, shall be vested in the City or the applicable utility provider.
 - b. The developer, or single customer, shall be responsible for all maintenance of the wastewater service connection, unless replacement of the service is required under

the roadway or pavement. When replacement is determined to be necessary by the Director of Engineering Services, the City shall assume the responsibility for replacement of that portion under the pavement.

- c. The title to all water mains and water meters constructed, and installed, including the title to service connections, shall be vested in the City or the applicable utility provider.
- (3) The City makes no guarantee that water supply or wastewater capacity will be available at any particular time or place.
- (4) Water or wastewater service lines shall not cross any adjacent lot. The public main shall be extended so as not to require the service to extend across another lot. Water and wastewater service lines shall be maintained by the property owner.
- (5) Public water and wastewater mains adjacent to federal, state, or county roadways shall be constructed outside the right-of-way in a separate easement unless otherwise agreed by those agencies and the City.

(d) **Water.**

(1) Design & Construction.

- a. Installation of Water Facilities. Where water is to be provided through the City system, the property owner shall install adequate water facilities, including fire hydrants, in accordance with the City's *Engineering Design Standards and Construction Details*, the adopted Fire Code, the current Rules and Regulations for Public Water Systems of the Texas Commission of Environmental Quality (TCEQ), and the firefighting standards of the Texas Board of Insurance. If any such requirements conflict, the most stringent requirement shall apply.
- b. Facilities for Health and Safety Emergencies; Alternative Water Sources. All water facilities connected to the City's water system shall be capable of providing water for health and emergency purposes, including fire protection and suppression. Water supply facilities shall be in accordance with the *Engineering Design Standards and Construction Details*. The design and construction of water system improvements and alternative water sources shall also comply with the following standards:
 - 1. Design and construction of a water source on the site shall be in accordance with applicable regulations of the Texas Commission of Environmental Quality (TCEQ).
 - 2. Design and construction of water service from the City shall be in accordance with the standards in the City's *Engineering Design Standards and Construction Details*.
 - 3. Design and construction of a fire protection and suppression system shall be in accordance with the standards in the *Engineering Design Standards and Construction Details*, and in accordance with the City's Fire Department and adopted Fire Code.

(2) Location.

- a. Shown on Construction Plans. The location and design of all fire hydrants, all water supply improvements and the boundary lines of special districts, private systems and certified water service areas, indicating all improvements proposed to be served, shall be shown on the Construction Plans.
- b. Extension of Lines. Extension of water lines shall be made along the entire frontage of the development adjacent to a street. If the subdivision is not adjacent to a street, the extension of water lines shall be accomplished in such a manner as to allow convenient future connections to said lines by new subdivisions.
- c. Waiver for Requirement. If new subdivisions will never be constructed beyond a developing subdivision due to physical constraints, the Director of Engineering Services may approve a Minor Waiver for this requirement in accordance with Section 9.01 of this Ordinance prior to action on the Construction Plans or prior to action on any Plat.

(3) Cost of Installation. The cost of installing all water supply improvements to be made by the developer, including off-site improvements, shall be included in the performance guarantees and Improvement Agreement, if applicable (refer to Section 5.04).

(4) Cost of Extension. Where the City's water distribution system is not planned to be extended in time to serve a proposed new development, all necessary water facilities to serve such development shall be provided by and at the expense of the developer. If oversizing of a water facility is deemed necessary by the Director of Engineering Services for future developments, then the City may participate in such oversizing costs as part of a Development Agreement.

(5) Alternative Water Systems. Developments may be approved with alternative water facilities according to the following criteria:

- a. Water well operation and quality shall meet the minimum requirements of the Texas Commission on Environmental Quality, Collin and Denton Counties, City health ordinances, and all other regulatory agencies, if applicable.
- b. Water wells may not be used for commercial sale of water.
- c. The cost to tie onto the public water system must exceed the certified initial capital cost of a well by twenty-five percent (25%). All costs and engineering designs shall be submitted by a licensed professional engineer. All costs and engineering designs shall be subject to approval by the Director of Engineering Services. If a residence is located within one thousand feet (1,000') of a domestic water supply, that residence must hook up to that service.

(6) Individual Wells.

- a. Within the City's Extraterritorial Jurisdiction (ETJ). Individual wells within the City's ETJ shall be subject to approval by the applicable County health official, and this approval shall be documented by the health official's signature on the water system

statement on the Preliminary and Final Plat. The property owner must submit with the Preliminary and Final Plat applications a certificate from a professional engineer who is registered, or a geoscientist who is licensed, to practice in the State of Texas verifying the adequacy of the proposed well water supply and potability prior to Preliminary Plat and Construction Plans approvals.

- b. Compliance with Other Regulations. Installation, operations and maintenance of individual wells shall comply with City standards, regulations of the Texas Commission on Environmental Quality (TCEQ), and any other applicable County or State rules and regulations. In the event of conflict among these regulations, whichever is the most stringent shall apply.

(e) **Wastewater.**

- (1) Extension of and Connection to the City's Wastewater Collection System. Extension of, and connection to, the City's sanitary sewer system shall be required for all new developments within the City's limits. Extension of, and connection to, the municipal sewer system shall also be required for new developments within the City's ETJ for any proposed development, lot, tract or parcel that is less than one (1) acre in size. The City is not in any way obligated to allow extension of municipal sewers outside the City's limits. The required extension of, and connection to, the municipal sewer system may be waived as a Minor Waiver, in accordance with Section 9.01, by the Director of Engineering Services if the Director of Engineering Services determines that such extension would require unreasonable expenditures and that an on-site wastewater disposal system (see Section 8.02(e)(5)) will function properly and safely.
- (2) Design & Construction. It is the policy of the City to require all wastewater collection lines to have gravity flow. The use of lift stations and force mains is prohibited unless a gravity design is impractical, as determined by the Director of Engineering Services. The location, design and sizing of all wastewater improvements shall be shown on the Construction Plans and are subject to approval by the Director of Engineering Services.
- (3) Cost of Installation. The cost of installing all wastewater improvements to be made by the developer, including off-site improvements, shall be included in the performance guarantees and Improvement Agreement, if applicable (refer to Section 5.04).
- (4) Extension.
 - a. Cost. Where the City's wastewater system is not planned to be extended in time to serve a proposed new development, all necessary wastewater facilities to serve such development shall be provided by and at the expense of the developer. If oversizing of a wastewater facility is deemed necessary by the Director of Engineering Services for future developments, then the City may participate in such oversizing costs as part of a Development Agreement.
 - b. Future Extensions. Pipe stub-outs shall be located in manholes to facilitate the future extension of wastewater lines. The Director of Engineering Services will determine the location and size of the stub-outs.



(5) On-Site Wastewater Disposal Systems.

- a. In cases where the Director of Engineering Services determines that extension of, and connection to, the City's sewer system is impractical or not feasible, and where the Director of Engineering Services approves the use of an on-site wastewater disposal system(s), such on-site system(s) shall provide adequate sewage disposal for all lots, tracts, parcels and structures in the development that cannot be connected to the City's sewer system.
- b. All on-site wastewater disposal systems shall be designed, permitted, constructed, operated and maintained in compliance with all applicable local, County and State regulations, and a permit for such system shall be acquired prior to Preliminary Plat and Construction Plans approvals.
- c. On-site wastewater disposal facilities requiring soil absorption systems may be prohibited where such systems will not function properly due to high ground water, flooding, unsuitable soil characteristics, or other topographical or environmental issue.
- d. Each lot, tract, parcel and structure that utilizes an on-site wastewater disposal system shall have a minimum land area of at least one (1) acre.
- e. No portion of any on-site wastewater disposal system shall be constructed within a minimum one hundred and fifty foot (150') radius around any water well either on-site or on other properties.
- f. All properties and structures that are allowed to utilize an on-site wastewater system shall, at the owner's expense or using funds escrowed by the developer (see below), tie onto the City's sanitary sewer system when such municipal system is extended to the service area as determined by the Director of Engineering Services. Such connection to the City's system shall occur within one (1) year after the system is made available to the area. The developer of any new subdivision shall provide escrow funds, the amount of which shall be subject to approval by the Director of Engineering Services, for this future connection to the City's sanitary sewer system.
- g. In order to protect the public health, safety and welfare, an existing on-site wastewater disposal system shall be upgraded, or reconstructed if necessary, to comply with the City's standards by the owner, at the owner's expense, if the operation of the facility does not comply with government regulations or if it causes objectionable odors, unsanitary conditions, pollution, etc.

SECTION 8.03 DRAINAGE AND ENVIRONMENTAL STANDARDS

(a) Drainage and Storm Water Management Policies.

- (1) Easements. Drainage easements shall be dedicated for public drainage features in accordance with requirements of this ordinance. Drainage easements and features shall be included as a portion of buildable (habitable structure) lot(s) and not as a lot by itself unless specifically authorized by the Director of Engineering Services. If a large development related feature is authorized on a separate lot, a home owner's association is required. Storm drainage easements shall be located along side property lines, and such easements shall be contained fully on one lot or tract, and shall not be split across the property line between two (2) lots or tracts.
- (2) Storm Water Quality. Designs for new development shall manage storm water in a manner that protects water quality by addressing the development's potential to cause erosion, pollution, siltation, and sedimentation in the MS4 and natural Major Creeks. The goal is to maintain after development, to the maximum extent practicable, the predevelopment characteristics in the Major Creek, which ultimately receives storm water runoff from the development. It is the developer's responsibility to ensure that designs for new development meet the storm water management requirements in the General Permit for Storm Water Discharges from Construction Activities issued by the TCEQ and its successor agencies. This permit includes the requirement for measures that will be installed during construction to control pollutants in storm water discharges after construction operations have been completed.
- (3) Storm Water Runoff. Storm water runoff shall be calculated anticipating a fully developed watershed. The Comprehensive Plan, existing land use, and zoning maps shall be used to determine fully developed conditions. The Director of Engineering Services reserves the right to review the determination of fully developed conditions and may require revisions.
- (4) Minimum Finish Floor Elevations. The Director of Engineering Services may require minimum finish floor elevations (MFF) to provide flood protection on certain lots contained within the subdivision. The MFFs shall be shown on the plat. These elevations shall incorporate the most current floodplain management criteria or other criteria as necessary to avoid damages. The minimum finish floor elevation shall be two feet above the fully developed 100-year water surface elevation where the MFF is associated with a natural Major Creek or open channel. When the MFF is necessitated by situations other than a natural Major Creek or open channel, the MFF shall be set by the developer's engineer and agreed upon by the City.

The following note or an amended version appropriate to the specific plat shall be added to any plat upon which the Director of Engineering Services requires the establishment of minimum finish floor elevations:

"The City reserves the right to require minimum finish floor elevations on any lot contained within this addition. The minimum elevations shown are based on the most current information available at the time the plat is filed and are subject to change."



(5) Off-site Drainage.

- a. When any proposed development requires off-site grading where storm water runoff has been collected or concentrated, it shall not be permitted to drain onto adjacent property except in existing Major Creeks, channels, storm sewers or streets unless one of the following is provided:
 1. Notarized Letter of Permission. The letter shall state that the permission shall bind the owner of the affected property and be a covenant running with the land. It shall also refer to the plans for the improvements creating the need for the permission. The letter shall be filed with the applicable County.
 2. Drainage Easement. A drainage easement shall be dedicated for Major Creeks, ditches, or drainage channels and shall be of a width sufficient to comply with the criteria outlined in the *Engineering Design Standards and Construction Details*.
- b. In the event the developer cannot obtain a notarized Letter of Permission or a drainage easement, the developer shall provide the City with documentation of all efforts, including evidence of a reasonable offer made to the affected property owner, and one of the following:
 1. Written Request for Assistance. The City may pursue acquisition of these easements through negotiations. If the negotiations are unsuccessful, the request may, at the developer's option, be submitted to City Council for consideration of acquisition through eminent domain. Any expenses, including attorney's fees, incurred by the City to acquire or attempt to acquire an easement shall be paid by the developer.
 2. Notarized Letter. With the concurrence of the Director of Engineering Services, the developer may execute a notarized letter stating the developer shall save and hold harmless the City from any and all claims or suits for damage arising from storm water runoff. The letter shall be in a form approved by the City Attorney.

(b) **Preliminary Storm Water Management Plan.**

- (1) A preliminary storm water management plan (SWMP) shall be prepared for all developments in accordance with the requirements set forth in the City's Development Application Handbook. The purpose of the SWMP is to identify permanent water quality feature opportunities for the development.
- (2) The preliminary SWMP shall be prepared in coordination with the preliminary drainage plan on all projects where both are required. The preliminary SWMP and the preliminary drainage plan may be shown on the same sheet. When a preliminary drainage plan is not required, the preliminary SWMP shall indicate the existing drainage patterns and runoff coefficients and the proposed changes to these items.
- (3) The preliminary SWMP must comply with the standards and criteria outlined in this ordinance, the *Engineering Design Standards and Construction Details*, and the Erosion Siltation Control Ordinance. The plan may satisfy the storm water management portion of the Storm Water Pollution Prevention Plan (SWPPP) that is required for construction

activities; however, the SWMP is not a substitution for the SWPPP. The City's review of the preliminary SWMP does not constitute acceptance of the final SWMP or the final development plans.

- (4) The developer shall provide a preliminary SWMP for the area proposed for development. For amended plats or plats with a previously accepted preliminary SWMP, the accepted preliminary SWMP shall be enforced unless a revised preliminary SWMP is required.
- (5) Three (3) paper copies of the preliminary SWMP plan shall be submitted with the submittal of a preliminary plat, replat, or minor plat for review and acceptance. The plan shall be labeled as "Preliminary." Upon acceptance of the plan, the plan shall be signed, sealed, and dated by the engineer, or shall contain a statement showing the engineer's name and license number and affirming the plan was prepared under the direction of the engineer and that the plan is preliminary.

(c) Preliminary Drainage Plan.

- (1) This plan shall show the watershed affecting the development and how the runoff from the fully-developed watershed will be conveyed to, through, and from the development. It must comply with the standards outlined in this Ordinance and the drainage design criteria found in the *Engineering Design Standards and Construction Details*. The preliminary drainage plan is a guide for the detailed drainage design. The review of the preliminary drainage plan does not constitute final drainage plan approval or authorize a waiver to this Subdivision Ordinance.
- (2) For any property involved in the development process, a preliminary drainage plan shall be provided, at the developer's expense, for the area proposed for development. For property with a previously accepted preliminary drainage plan, the accepted preliminary drainage plan may be submitted and enforced unless a revised preliminary drainage plan is required by the City due to lot reconfiguration or other conditions created by the new plat. The Director of Engineering Services may waive the requirement for a preliminary drainage plan if the submitted plat is not anticipated to cause any significant change in runoff characteristics from a previously accepted drainage study or for single residential properties where no drainage problems are anticipated. If the applicant requests a waiver in writing, a copy of any previous drainage plan shall be provided.
- (3) Three (3) paper copies of the preliminary drainage plan shall be submitted with the submittal of a preliminary plat, replat, or minor plat for review and acceptance. The plan shall be labeled as "Preliminary." The plan shall be stamped by and dated by the engineer.

(d) Floodplain Development Requirements.

- (1) All development proposed adjacent to or within the 100-year floodplain shall be in accordance with the City's Flood Hazard Prevention Ordinance and this Ordinance.

(e) Major Creeks.

- (1) 100-Year Floodplain Restrictions. For the health, safety and welfare of the City's residents and for the conservation of water, storm drainage and sanitary sewer facilities, the City prohibits development of any portion of a property that lies within the 100-year floodplain of any Major Creek. Major Creeks shall be protected from destruction or damage resulting from clearing, grading, and dumping of earth, waste or other foreign materials. Clearing, grading, excavation

or filling of any area within the 100-year floodplain or within any Major Creek shall be prohibited unless authorized in writing by the City.

- (2) Major Creek Restrictions. All Major Creeks (See Diagram 8.03-1) shall be maintained in an open natural condition. Each Major Creek is subject to the following requirements for all types of development:
 - a. The 100-year floodplain and Erosion Hazard Setback shall be dedicated on the Final Plat to the City as a single lot or may be owned and maintained by an HOA, pursuant to Section 8.11 of this Ordinance. At no time shall any portion of the 100-year floodplain exist or be within any single-family or two-family residential lot. Erosion Hazard Setback requirements are located in the *Engineering Design Standards and Construction Details*.
 - b. The Commission may waive any of these dedication requirements for a Replat that was originally platted prior to the adoption of this requirement (i.e., the adoption date of the City's Major Creek Ordinance No. 99-09-25, which was on September 21, 1999).
- (3) Access. Access shall be dedicated for maintenance purposes as required by the Director of Engineering Services (See Diagrams 8.03-2 and 8.03-3).
- (4) Retaining Wall(s). A retaining wall(s) may be allowed between a house and the Major Creek as approved by the Director of Engineering Services.
- (5) Adjacent Street(s) Widths. The size of streets adjacent to a Major Creek shall have a minimum right-of-way width of fifty feet (50'). The City shall participate in fifty percent (50%) of the paving costs when the City determines that a collector-size street, sixty feet (60') of right-of-way width, is necessary for traffic safety, public access, and/or public on-street parking.
- (6) Adjacent Street(s) Types (see Diagram 8.03-3).
 - a. Phases. Street requirements shall be reviewed per development phase.
 - b. Parallel Streets. A minimum 60% of the linear frontage of the Major Creek shall be adjacent to a parallel street.
 - c. Cul-de-sac Streets. No more than one cul-de-sacs in a row. Cul-de-sacs shall comply with the following criteria (See Diagram 8.03-4):
 1. A minimum 50% of an adjacent cul-de-sac bulb shall be open to the Major Creek and no residential lot shall encroach within the area between this line and the Major Creek.
 2. An entry monument(s) or feature(s) as well as landscaping shall be provided at the end of the cul-de-sac and a pathway of a minimum 12 feet in width shall be provided to the Major Creek as approved by the Director of Development Services.
- (7) Setbacks. Any side lot line adjacent to a Major Creek shall provide a twenty-five foot (25') building setback (See Diagram 8.03-2).
- (8) Fences. Fences adjacent to a Major Creek shall comply with the following criteria (See Diagram 8.03-5):
 - a. Have a maximum fifty percent (50%) opacity;
 - b. Have a height of six (6) feet to eight (8) feet as measured from grade at that location;

- c. Ornamental metal fences, with either masonry columns or a masonry base of a maximum three (3) feet in height shall be located along the rear and side of the lots, are subject to City review and approval by the Director of Development Services; and
 - d. The lot owner is responsible for the maintenance of the fence.
- (9) Exceptions for Planned Development. For properties which have an approved Concept Plan that is part of a Planned Development Ordinance adopted prior to the effective date of the Major Creek Ordinance (Ordinance No. 99-09-25), Section 8.03(e)(6) shall not apply; provided, however, said properties are subject to the following conditions:
- a. Any lot that backs to the 100-year floodplain shall have a minimum rear yard setback of twenty-five feet (25');
 - b. Any lot that sides to the 100-year floodplain shall have a minimum side yard setback of fifteen feet (15').
 - c. Alternating cul-de-sacs and looped streets shall be provided at intervals not to exceed twelve-hundred feet (1,200') for access to the 100-year floodplain; and
 - d. The 100-year floodplain shall be available to public access from the end of a cul-de-sac.
- (10) Additional Studies. At the request of the City, the property owner shall submit additional studies, including but not limited to the following, as deemed appropriate and necessary by the City, as part of the Preliminary Plat submittal requirements. These studies shall be considered during review and approval of the Preliminary Plat.
- a. Wetland Delineation Study;
 - b. Habitat Study;
 - c. Vegetative Study;
 - d. Erosion Hazard Setback Study;
 - e. Storm Drainage Study;
 - f. Riparian (i.e., Tributary) Study;
 - g. Flood Study; and
 - h. Downstream Assessment Study.

SECTION 8.04 STREET REQUIREMENTS

(a) Streets Basic Policy.

(1) Street Improvements. In platting a new development, the property owner shall provide additional right-of-way needed for existing or future streets as required by the *Thoroughfare and Circulation Design Requirements* and as shown on the City's adopted *Comprehensive Plan*.

(2) Improvement of Existing Substandard Streets.

- a. When a proposed residential or nonresidential development abuts one or both sides of an existing substandard street, the developer shall be required to improve the substandard street and its appurtenances (such as curbs and gutters, sidewalks, barrier-free ramps, street trees, etc.) to bring the same to City standards, or to replace it with a standard City street, at no cost to the City other than as may be provided in the City's cost-sharing policies, including the City's Impact Fee Ordinance that are in effect at the time of Final Plat approval.
- b. If the proposed development is located along only one side of a substandard street, and if the City makes a determination that it is not feasible to improve the full width of said substandard street at that time the City may require the developer to pay into escrow, in accordance with Section 5.04, funds for the future improvement of the street as a condition of Final Plat approval for the development.
- c. The developer may request a Major Waiver (see Section 9.01) or may file a proportionality appeal (see Section 9.02) if the requirements for improving an existing substandard street imposed by this Section 8.04(a)(2) would result in unnecessary hardship or would be disproportional to the impacts generated by the development on the City's street system.

(3) New Perimeter Streets.

- a. When a proposed residential or nonresidential development is developed abutting an existing or planned major thoroughfare, minor thoroughfare or collector street (as shown on the City's adopted *Comprehensive Plan*), the developer shall construct a portion of the abutting street and its appurtenances (such as curbs and gutters, sidewalks, barrier-free ramps, street trees, etc.) to the City's design standards for that type of street (per the *Thoroughfare and Circulation Design Requirements* and the *Engineering Design Standards and Construction Details*). If the Director of Engineering Services makes a determination that it is not feasible to construct the abutting street and its appurtenances at that time, the City may require the developer to pay into escrow, in accordance with Section 5.04, funds for the future construction of the street as a condition of Final Plat approval for the development.

(4) New Internal Streets.

- a. All new streets and their appurtenances internal to a proposed residential or nonresidential development shall, at a minimum, be built to a width and design which will adequately serve that development, and shall conform to the City's design standards in the *Thoroughfare and Circulation Design Requirements* and the *Engineering Design Standards and Construction Details*. If oversizing of an internal street is deemed necessary by the Director of Engineering Services for traffic safety or efficiency (such as adjacent to a school or park site), then the City and/or the applicable Independent School District may participate in such oversizing costs as part of a Development Agreement with the developer.
- b. Streets which temporarily dead end at power lines, railroads or similar rights-of-way shall be constructed for at least one-half the distance across these rights-of-way, or provision shall be made to place the construction cost for said improvements in escrow with the City in accordance with Section 5.04.
- c. When, in the Director of Engineering Services' judgment, it is not feasible to construct an internal street or appurtenances to an internal street at the time of development of the subdivision, the City may require the developer to pay into escrow, in accordance with Section 5.04, funds for the future construction of the street or its appurtenances as a condition of Final Plat approval for the development.

- (5) Impact Fees. All fees due on the project shall be paid in accordance with the City's Impact Fee Ordinance and/or Development Agreement.

(b) **Street Design and Appurtenances.**

- (1) Application of Requirements. Street design requirements are subject to the provisions included in the *Thoroughfare and Circulation Design Requirements*, *Engineering Design Standards and Construction Details*, and Planned Development Ordinance (if applicable to the subject property) as well as the regulations contained within this Subdivision Ordinance.
- (2) Conformity to the City's Comprehensive Plan. The general location of streets shall conform to the City's *Comprehensive Plan*. For streets that are not shown on the City's *Comprehensive Plan*, such as local residential streets, the arrangement of such streets shall:
 - a. Provide for the continuation or appropriate projection of existing streets or street stubs from or into surrounding areas – refer to street stub requirements outlined in Section 8.04(b)(9) and connectivity requirements in Section 8.04(b)(10);
 - b. Conform to any plan for the neighborhood approved or adopted by the City to address a particular situation where topographical or other conditions make continuance or conformity to existing streets impractical; and
 - c. Not conflict with existing or proposed streets or driveway openings, including those on the opposite side of an existing or planned thoroughfare, as described within the



Thoroughfare and Circulation Design Requirements. New streets shall align with opposite streets and driveway openings such that median openings can be shared.

- (3) Relation to Adjoining Street System. The proposed street system shall extend all existing major streets and such existing secondary and local streets as may be necessary for convenience of traffic circulation and emergency ingress and egress.
- (4) Street Widths & Rights-of-Way. Street(s) widths and related rights-of-way shall be designed in accordance with the City's:
 - a. *Comprehensive Plan*;
 - b. *Thoroughfare and Circulation Design Requirements*; and
 - c. Planned Development Ordinance (if applicable to the subject property).

All streets shall be paved with a permanent type of pavement in accordance with the *Engineering Design Standards and Construction Details*.

- (5) Private Streets. Private streets within the City and/or the ETJ may be allowed in accordance with the Zoning Ordinance. Private streets within the City's ETJ require Commission action and approval. Private streets shall be designed and constructed to the City's standards for public streets, in accordance with the *Engineering Design Standards and Construction Details* and the *Thoroughfare and Circulation Design Requirements*.
- (6) Street Names, Street Name Signs, and Traffic Control Signs.
 - a. Street Names. New streets shall be named so as to provide name continuity with existing streets, and so as to prevent conflict or "sound-alike" confusion with similar street names. All street names shall be approved by the Director of Development Services prior to any Plat approval, and prior to approval of the Construction Plans.
 - b. Cost of Signs. The cost of street name signs and traffic control signs shall be paid for, and the signs shall be installed, by the developer.
 - c. City Standards. All street name signs and traffic control signs shall conform to the City's details for street name sign design and the latest edition of the Texas "Manual of Uniform Traffic Control Devices".
- (7) Traffic Studies. The Director of Engineering Services may require a Traffic Impact Analysis (TIA) or other type of engineering study from the developer prior to any approval for plats or construction plans for technical data pertaining to the potential traffic impact of the proposed development on the City's street system.
- (8) Street Lengths.
 - a. See the *Thoroughfare and Circulation Design Requirements* for street length design requirements.
 - b. A Preliminary Plat or Final Plat approved prior to the effective date of this Subdivision Ordinance shall be exempted from the street length requirement. However, the City may consider, and shall be authorized to enforce, application of

these requirements if major changes to the approved Preliminary Plat or Final Plat are sought by the applicant. Major changes include, but are not limited to:

1. Rerouting of streets; or
2. Increasing the lot count by five percent (5%) or more from the previously approved Preliminary Plat or Final Plat.

(9) Stub Streets.

- a. See the *Thoroughfare and Circulation Design Requirements* for the design requirements.
- b. Connections are required to adjacent vacant properties at locations as approved by the Director of Development Services.
- c. A note shall be clearly placed on the Final Plat indicating that the stub street is intended to be extended with future development (see requirements for temporary turn-arounds in the *Thoroughfare and Circulation Design Requirements*).
- d. All stub streets shall have a sign prominently posted at the terminus of the street to indicate that the street will be extended in the future.
 1. The sign shall comply with standards established by the Director of Engineering Services,
 2. Installation and cost of the sign shall be the responsibility of the developer.

(10) Street Connectivity.

- a. New developments shall provide street connections to adjacent developments, as determined by the Director of Development Services, allowing access between developments for neighborhood traffic and to enhance pedestrian and bicycle connectivity as recommended in the City's Comprehensive Plan.
- b. The use of cul-de-sac streets shall be limited within new developments to the greatest extent possible. The Fire Chief and the Director of Development Services shall have the authority to determine whether or not the use of cul-de-sacs in a development meets the intent of this Section during City review and consideration of the Preliminary Plat.

- (11) Street Lighting. Street lighting shall be provided along all streets and thoroughfares in accordance with the *Thoroughfare and Circulation Design Requirements* and the *Engineering Design Standards and Construction Details*. The Director of Engineering Services shall be the responsible official for decisions related to street lighting, and may authorize a Minor Waiver, in accordance with Section 9.01, for a street lighting requirement if such Waiver will not compromise public health, safety, security and convenience.

SECTION 8.05 ALLEYS

- (a) **Alleys Required.** Alleys shall be provided to serve all single-family and two-family residential lots. Alleys shall be constructed according to design criteria in the *Thoroughfare and Circulation Design Requirements* and the *Engineering Design Standards and Construction Details*. The Director of Engineering Services and Director of Development Services may authorize a Minor Waiver, in accordance with Section 9.01, to the requirement for alleys if all of the following conditions are met:
- (1) Sufficient on- and off-street parking is provided for each lot in the development;
 - (2) No lot-to-lot surface storm drainage will occur within the development;
 - (3) The subdivision design allows for an efficient solid waste collection pattern; and
 - (4) Adequate area is dedicated for storm drainage facilities and utilities.
- (b) **Dead End Alleys.** Permanent dead end and "hammerhead" alleys are prohibited. All alleys shall have adequate turnouts and street entrances such that vehicular traffic flow is continuous and efficient. Where a temporary dead end alley situation is unavoidable (such as due to project phasing), a temporary turn-around bulb or turnout onto a street, either of which will require a temporary alley easement, shall be acquired and shown on the Preliminary and Final Plats. Alleys in new subdivisions shall connect to and/or be aligned with alleys in adjacent subdivisions.

SECTION 8.06 THOROUGHFARE SCREENING

- (a) **Required Screening.** Screening is required for all single-family detached, two-family, and townhome lots and subdivisions as follows:
- (1) Back of Lots. The rear of all lots that back to a Type D or higher class Thoroughfare;
 - (2) Side of Lots. The side of all lots that side to a Type D or higher class Thoroughfare, unless a lot sides to a median-divided entry street into a subdivision; and
 - (3) Between Streets/Alleys. Between any street and an adjoining parallel alley.
- (b) **Screening Plan.**
- (1) Preliminary Screening Plan. A Preliminary Screening Plan shall be submitted for review and approval with the Preliminary Plat.
 - (2) Final Screening Plan. A Final Screening Plan, including entry features and showing all elevations and materials, shall be submitted with the Construction Plans. The Screening Plan shall be reviewed and considered for approval by the Director of Development Services prior to approval of the Construction Plans, and prior to scheduling a Pre-Construction Meeting (refer to Section 5.02).
 - (3) City Design Standards. Screening walls and fences shall be designed in accordance with the City's design standards. Structural elements shall be sealed by a licensed professional engineer and approved by the City.

- (4) Timing of Installation and Inspection. Upon installation of the required screening, the developer shall contact the City's Landscape Architect and the Director of Engineering Services to request final inspections of screening elements. All required screening shall be installed prior to City issuance of a Letter of Final Acceptance (see Section 5.05) unless delayed in accordance with Section 8.06(b)(5).
- (5) Surety Provided for Delay. The developer may delay the installation of screening by providing surety to guarantee the installation of required screening. Such surety shall be in an amount and format that is approved by the Director of Development Services and by the Director of Engineering Services. Required screening shall be installed within six (6) months following the date of issuance of the Letter of Final Acceptance (refer to Section 5.05).

(c) Landscape Plan.

- (1) Landscape Plan. A Landscape Plan for landscaping that will be installed for the development, including landscaping for common and amenity areas, entryways and thoroughfare screening, shall be submitted with the Construction Plans and shall be approved by the Director of Development Services prior to approval of the Construction Plans and prior to scheduling a Pre-Construction Meeting (refer to Section 5.02).
 - (2) Standards. Landscape materials and installation shall be in accordance with Landscape Requirements in the Zoning Ordinance.
 - (3) Timing of Installation and Inspection. Upon installation of all landscaping, including that required for thoroughfare screening, the developer shall request a final inspection of landscaping elements by the Director of Development Services. All required landscaping shall be installed prior to the City's issuance of a Letter of Final Acceptance (see Section 5.05) and Certificates of Occupancy for homes, excluding model homes which may be released early.
 - (4) Surety Provided for Delay. The developer may delay the installation of landscaping by providing surety to guarantee the installation of required landscaping. Such surety shall be in an amount and format that is approved by the Director of Development Services and by the Director of Engineering Services. Required landscaping shall be installed within six (6) months following the date of issuance of the Letter of Final Acceptance (refer to Section 5.05).
- (d) Screening & Landscaping Options.** Screening required by Section 8.06(a) shall be installed by the developer in accordance with the approved Screening and Landscaping Plan(s), as applicable. The design of such screening shall conform with one of the options shown in Table 8.06-1 and Diagrams 8.06-1, 8.06-2(a), 8.06-2(b), 8.06-2(c), 8.06-3, 8.06-4(a) and 8.06-4(b).
- (1) Landscape Edge. All landscape edges provided for required screening shall be located within a private "non-buildable" lot (shown on the Preliminary and Final Plats) that is dedicated to, owned by, and maintained by the subdivision's Homeowners' Association (HOA). Required landscape edges shall be exclusive of all required street and right-turn rights-of-way, drainage easements, and utility easements.



(2) Screening Walls & Fences. All required screening walls and fences shall be:

- a. Located entirely within the required landscape edge (except for at cul-de-sac bulbs, Option 4, where the required ornamental fence shall be located entirely upon the cul-de-sac lots abutting the adjacent street);
- b. Subject to the approval of the Director of Development Services;
- c. Of the minimum (and maximum) heights as shown in Table 8.06-1;
- d. Maintained by the HOA (or by the private lot owners if the HOA is dissolved in the future);
- e. The minimum height of required walls and fences shall be measured from the nearest alley edge, rear lot property line (where no alley exists), or street-side sidewalk grade, whichever is higher. The maximum height of columns, including capstones, shall be nine feet (9');
- f. Any area between alley paving and a screening wall or fence shall be paved with concrete unless otherwise approved by the Director of Engineering Services; and
- g. A minimum five-foot (5') wide wall maintenance easement, dedicated to the HOA, shall be provided on all lots abutting the required screening along the full length of the required screening wall or fence, unless separated by an alley. Such easement shall be shown on the Preliminary and Final Plats.

(3) Trees and Shrub Screens. All required screening trees and shrubs shall be planted within the landscape edge (except for as provided for cul-de-sac bulbs, Option 4). All trees and other landscape materials required for screening shall be of evergreen drought-tolerant species selected from the City's Approved Plant List in the Zoning Ordinance, and shall be subject to approval by the Director of Development Services. Minimum tree size shall be at least three caliper inches (3"), and a single species of tree shall not exceed forty-five percent (45%) of the plantings for all screening options. All trees shall be planted a minimum of four feet (4') from easements, curbs, utility lines, screening walls, fences, sidewalks and alleys, as determined by the Director of Development Services.

- a. Solid Shrub Screens. For solid shrub screens, evergreen shrubs from the City's Approved Plant List (in the Zoning Ordinance) shall be used that are low-maintenance, drought-tolerant, and insect- and disease-resistant. Shrubs shall be spaced such that they will provide a solid minimum six-foot (6') tall screen upon planting.

(4) Cul-De-Sac Bulbs. For all cul-de-sac bulbs that abut, or "open", onto an adjacent street (Option 4), the following additional screening standards shall apply:

- a. All required trees and other landscape materials shall be located within the side yards of the cul-de-sac lots abutting the adjacent street unless a landscape edge, dedicated to and maintained by the HOA, is provided.
- b. Trees required for screening do not count toward the number of trees required for residential lots in the Zoning Ordinance.
- c. A minimum ten foot (10') separation, or the required landscape edge width, whichever is greater, shall be provided between the right-of-way for the cul-de-sac

and the right-of-way for the adjacent street. A sidewalk shall be provided to connect the sidewalk along the adjacent street to the sidewalk along the cul-de-sac within a twenty foot (20') pedestrian access easement.

- (5) Berms. Berms may be used in conjunction with any screening option, subject to approval by the Director of Engineering Services and Director of Development Services. Berms shall be placed within the landscape edge on private property (i.e., not within public right-of-way), shall not exceed a three-to-one (3:1) slope, and shall be designed such that they do not hinder maintenance, storm drainage, accessibility or visibility. Topographic information for berms shall be shown on the Landscape Plan and on the Grading and Drainage Plans for the development.

(e) Wall Elevations & Living Screens.

- (1) If the top-of-wall elevation for a required screening wall is less than six feet (6'), as measured in accordance with Section 8.06(d)(2)e, a solid, irrigated living screen shall be used in combination with the screening wall to provide the necessary screening at the appropriate height from grade.
- (2) An irrigated living screen consisting of large trees and additional large evergreen shrubs that are appropriate for screening purposes (selected from the City's Approved Plant List in the Zoning Ordinance) shall be planted within the landscape edge where the height deficiency occurs.
- (3) The species, sizes, spacing and arrangement of all trees and shrubs that are required for screening shall be subject to the discretion and approval of the City's Landscape Architect and the Director of Development Services. All plant materials used for living screens shall be insect- and disease-resistant, and shall be plant species that are well freeze-hardy, low maintenance, well-adapted to the north central Texas area, and drought-tolerant such that they are self-sustaining with minimal irrigation and care.
- (4) When an irrigated living screen is utilized, the Landscape Plan (Section 8.06(c)) shall demonstrate adequate visual screening at the heights required and within required time frames, and such living screen shall be subject to the approval of the Director of Development Services.
- (5) Tree and living screen requirements on sites with topography changes are subject to the approval of the City's Landscape Architect and the Director of Development Services.

(f) Irrigation Requirements. An automatic, underground irrigation system shall provide one hundred percent (100%) coverage for all living screens and plantings, and shall conform with the following:

- (1) Line Placement. Irrigation lines shall be placed a minimum of two and one-half (2½) feet from the sidewalk. Reduction of this requirement is subject to review and approval by the Director of Development Services. The main irrigation lines, section lines and zone valves for irrigation systems shall be placed outside of required right-of-way corner clips.
- (2) Type of Irrigation. Trees and shrubs shall be irrigated by deep-watering bubbler irrigation lines only on a separate line or zone (for targeted irrigation during periods of drought). Other landscaping may be irrigated per the irrigation standards in the Zoning Ordinance.

Separate valves shall be provided to turn off all or some irrigation lines/zones during periods of drought, water conservation or freezing weather temperatures.

(3) Detectors. Evapotranspiration (ET) controllers are required on all irrigation systems.

(4) Water Meter. The developer is responsible for installing irrigation water meter(s). The Director of Engineering Services shall approve all water meter sizes and placement. All water meters shall be easily accessible from the street.

(g) **HOA Responsibilities.** All developments that have thoroughfare screening, entry features or common amenity areas shall be required to have a mandatory HOA to own and maintain such features (see Section 8.11). If an HOA fails to maintain any required screening device, the Director of Public Works and/or the Director of Development Services, at their discretion, shall have the authority to cause the removal and/or replacement of such required screening at the expense of the HOA.

SECTION 8.07 SIDEWALKS

(a) Sidewalks (and any necessary sidewalk easements on private property) shall be provided according to the standards in the *Thoroughfare and Circulation Design Requirements*.

SECTION 8.08 DRIVEWAYS, FIRE LANES AND ACCESS EASEMENTS

(a) **Standard Requirements.** All driveway approaches, curbs, gutters, pavements and appurtenances necessary to provide access to properties shall be provided by the developer, shall be designed, constructed and maintained in accordance with standards in the City's *Thoroughfare and Circulation Design Requirements, Engineering Design Standards and Construction Details*, Zoning Ordinance, and Planned Development Ordinance (if applicable to the subject property), and shall be subject to approval by the Director of Engineering Services.

(b) **Fire Lanes.** Fire lanes are to be designed in accordance with the City's adopted Fire Code. Fire lane easements shall be shown on the Preliminary Site Plan (see Zoning Ordinance) and on the Final Plat, and shall be maintained to the City's standards by the property owner. For safety and emergency accessibility reasons during construction, developments other than single-family detached or two-family residential subdivisions shall not be allowed to proceed with vertical structural construction above the foundation prior to:

(1) Completion and City inspection of all fire lanes and fire hydrants on the site (unless otherwise approved by the Fire Chief); and

(2) Issuance of a Building Permit for the structure.

(c) **Access Easements.** Access easements shall be provided as directed by the Director of Engineering Services and Director of Development Services.

**SECTION 8.09 EASEMENTS, LOT & BLOCK DESIGN, MONUMENTS, SUBDIVISION NAMES,
FRANCHISE UTILITIES**

(a) Easements.

- (1) The type, size and location of easements shall be determined by the Director of Engineering Services. All existing and proposed easements shall be shown on the Preliminary and Final Plats. All easements shall be labeled on the Final Plat and dedicated for the specific purpose intended (e.g., "City Utility Easement", "City Drainage Easement", "CoServ Electric Easement", etc.).
- (2) Off-site easements that are necessary to fulfill City requirements or are required by the City shall be dedicated to the City by separate instrument (unless the abutting property is platted) and shall be approved by the Director of Engineering Services. If the abutting property is platted, then a Replat of that property shall be required to establish the off-site easement.

(b) Zoning Compliance. All lots shall conform with the zoning district requirements, unless located in the ETJ in which they shall comply with the agreements between the City and the Counties.

(c) Residential Lots Adjacent to Drainage Areas. Lots shall be exclusive of any portion of a natural drainage area (i.e., Major Creek, stream, tributary, etc.), maintenance access, and/or erosion hazard setback (see Major Creek Ordinance). Retaining walls may be allowed on lots adjacent to natural drainage areas as approved by the Director of Engineering Services.

(d) Lot Shape. The City reserves the right to disapprove any lot which, in its opinion, will not be suitable or desirable for the purpose intended, or which is so oddly shaped as to create a hindrance to the logical lot layout of surrounding properties and/or create an irregular building envelope. The following requirements shall also apply.

- (1) Lots shall be generally rectangular in shape. Sharp angles between lot lines shall be avoided. Flag lots are prohibited (See Diagram 8.09-1).
- (2) Irregularly shaped lots shall have sufficient width at the building line to meet minimum lot width and frontage requirements for the appropriate zoning district (if applicable), and shall provide the minimum building pad required by zoning without encroachment into front, side or rear yard setbacks or into any type of easement (See Diagram 8.09-2).

(e) Lot Lines, Buildability.

- (1) Side Lot Lines. Side lot lines shall be at ninety degree (90°) angles or radial to street right-of-way lines to the greatest extent possible (See Diagrams 8.09-3 and 8.09-4). The Director of Development Services may grant a Minor Waiver, in accordance with Section 9.01, if unusual circumstances exist on the subject property or on adjacent property that make it difficult to comply with this requirement.
- (2) Lot Lines and Jurisdictional Boundaries. All lot lines shall, to the greatest extent possible, align along county, school district, and other jurisdictional boundary lines such that lots are



fully within one county, school district, or other jurisdiction. The Director of Development Services may grant a Minor Waiver, in accordance with Section 9.01, to this requirement if a county, school district or other jurisdictional boundary line will bisect a lot, provided that the entire residential dwelling or main structure is constructed entirely within one county, school district or other jurisdiction (i.e., the structure does not "straddle" school district or jurisdictional boundary line).

- (3) Lot Buildability. Any portion of a lot that is non-buildable for any reason shall be clearly shown as such on the Preliminary and Final Plats. A "Lot Buildability" detail shall be submitted along with the Preliminary and Final Plats, and shall verify that the buildable portion of such a lot can accommodate a dwelling or main structure that complies with applicable City zoning regulations (if located within the City's limits) and building codes.

(f) **Lot Orientation Restrictions.**

- (1) Type A and Type B Thoroughfares. No single-family, two-family, or townhome lot(s) shall front onto or have a driveway onto Type A and Type B thoroughfares, as described within the *Thoroughfare and Circulation Design Requirements*.
- (2) Type E, F or G Thoroughfares. Lots are prohibited from backing to Type E, F or G thoroughfares, as described within the *Thoroughfare and Circulation Design Requirements*.

(g) **Lot Frontages.**

(1) Street Frontage.

- a. Adequate Frontage. Each lot shall have adequate access to a street (or an approved public way) by having frontage on such a street that is not less than forty feet (40') at the street right-of-way line (See Diagram 8.09-3), or as otherwise specified in the Zoning Ordinance or a Planned Development (PD) Ordinance, if applicable. Lots fronting onto an eyebrow or bulb portion of a cul-de-sac shall also have a minimum frontage of forty feet (40') at the street right-of-way line (See Diagram 8.09-4).
- b. Frontage Exception. For non-residential developments ten (10) acres or greater, the lots may be platted to a public way instead of a dedicated street upon approval by the Director of Development Services

(2) Double Frontage.

- a. Single-Family, Two-Family and Townhome Lot(s). Double frontage lots are prohibited, except that single-family, two-family or townhome lots may back or side onto a Type D or larger thoroughfare, as described within the *Thoroughfare and Circulation Design Requirements*, with appropriate screening (see Section 8.06). Where lots back or side onto a Type D or larger thoroughfare, no driveway access is allowed onto the thoroughfare from the rear or side of the lot.
 - b. Multi-Family and Non-Residential Lots. Where lots have frontage on more than one street, a front building line shall be established for each street.
- (3) Lots Facing Other Lots. Whenever feasible, each residential lot shall face the front of a similar lot, or shall face a park or open space if one exists or is planned (see Section 8.09(h)), across the street. In general, an arrangement placing adjacent lots at right angles

to each other should be avoided. The Director of Development Services may grant a Minor Waiver, in accordance with Section 9.01, if unusual circumstances exist on the subject property or on adjacent property that make it difficult to comply with this requirement.

- (h) **Lots in Relation to Parks/Open Space.** All lots that are located directly across a street from a park/open space shall face onto the park/open space. Also refer to Section 8.12(b) of this Ordinance.
- (i) **Large Lots and Tracts.** If the lots or tracts of land in a proposed development are large enough to suggest possible further subdivision in the future, or if portions of the property are not subdivided or developed immediately, then the Preliminary Plat shall show how such large tracts or remainder portions of the property can be subdivided into conforming lots at a later time, and shall also show how streets can be extended and how median openings can be aligned and shared in the future.
- (j) **Lot & Block Numbering.** All lots within each phase of a development are to be numbered consecutively within each block. Each block shall have an alpha or numeric, designation (e.g., "Block A", "Block 6", etc.).
- (k) **Building Lines.** Building lines along all streets shall be shown on the Preliminary and Final Plats on lots and shall conform with the minimum setbacks for front, side and rear yards as required by the Zoning Ordinance (if within the City's limits) on the basis of the respective districts (i.e., single-family, two-family/duplex, multi-family, commercial, retail office, mobile home, industrial, etc.).
- (l) **Block Requirements.** See the *Thoroughfare and Circulation Design Requirements*.
- (m) **Monuments.**
 - (1) General Placement. Monuments consisting of minimum three-eighths inch (3/8") diameter steel rods, at least twenty-four inches (24") long, shall be placed at all:
 - a. Lot and block corners (wherever a lot line bearing changes);
 - b. Intersection points of alley and block lines; and
 - c. Curve and tangent points along block, lot and right-of-way lines within the subdivision.
 - (2) Subdivision Monumentation. At least two (2) property corners shall be marked with monuments of three dimensional coordinates established from the City's Monumentation System and using the City's Combined Scale Factor, as necessary. The corners so marked should be at opposing ends of the property unless otherwise approved by the Director of Engineering Services.
- (n) **Subdivision Names.** New subdivisions shall be named so as to prevent conflict or "sound-alike" confusion with the names of other subdivisions. Subdivisions with similar names (e.g., Stonebriar Park Estates and Stonebriar Highlands) shall be located in proximity to each other, not in different areas of the City. A Minor Waiver, in accordance with Section 9.01, may be approved by the Director of Development Services upon a finding that the proposed subdivision name will not cause confusion, especially for emergency responders.



(o) **Franchise Utility Policy.**

- (1) General Requirements. The Director of Engineering Services may require easements for poles, wires, conduits, gas, telephone, cable TV or other utility lines if necessary or advisable in the opinion of the Director of Engineering Services.
- (2) Locations. Utility easements may be located as follows.
 - a. Utilities shall be located in the alley rights-of-way along the rear property lines of lots or tracts whenever an alley is provided.
 - b. Utilities shall be located in easements provided adjacent to the street rights-of-way along the front of lots or tracts whenever an alley is not provided.
- (3) Ground-Mounted Equipment. Ground-mounted equipment shall not be placed in visibility, access or maintenance easements.
 - a. All ground-mounted equipment within view of a public street right-of-way shall be screened from the adjacent street by minimum five (5) gallon evergreen shrubs, or larger, on three-foot (3') centers on the side facing the right-of-way, as well as along both sides of the equipment such that it will be fully screened from view from the street.
 - b. Planting materials selected shall be materials that will grow at least to the height of the equipment height, and will provide a continuous and mostly solid/opaque living screen, within two (2) growing seasons from the date planted. The planting material must be selected from the list of materials set forth in the City's Zoning Ordinance.
 - c. The proposed planting shall be included on the Landscape Plan as required in Section 8.06(c) of this Ordinance.
 - d. Public-owned ground-mounted equipment (such as City traffic controller boxes, etc.) shall be exempt from the screening requirements in this Section.

SECTION 8.10 SUBDIVISION AMENITIES

- (a) **Description & Definition.** The term "amenity" is described within Section 8.11(c)(1) and defined within Section 10.02 of this Ordinance.
- (b) **Requirements.** Where amenities are proposed in conjunction with a development, such amenities shall be reviewed and approved in accordance with the following:
 - (1) Preliminary plans and illustrations, along with a written statement of such concepts, shall be submitted for review and approval with the Preliminary Plat.
 - (2) Plans for amenities shall then be incorporated into the Screening Plan and/or Landscape Plan (refer to Sections 8.06(b) and 8.06(c) of this Ordinance, respectively), as appropriate, for submittal as part of the Construction Plans (see Section 5.01 of this Ordinance).
 - (3) Structural elements shall be sealed by a licensed professional engineer and shall be considered for approval by the City.

- (4) A Site Plan, reviewed and approved in accordance with the Zoning Ordinance, is required for private recreational facilities and parks;
 - (5) City review and approval of plans for amenities shall be required prior to issuance of a Letter of Final Acceptance for the subdivision improvements (refer to Section 5.05).
- (c) **Design of Amenities.** The design of amenities shall conform to the following:
- (1) Entry features shall be constructed entirely on privately owned property (i.e., not within public right-of-way), and shall not suspend over a public right-of-way, unless otherwise approved by the Director of Public Works and the Fire Chief. Minor elements of an entry feature may be placed within an entry street median upon Commission approval, provided that such street median is platted as a non-buildable lot and dedicated to a mandatory HOA for private ownership and maintenance. An entry feature having a water pond, fountain or other water feature shall only be allowed if approved by the Director of Engineering Services and the Fire Chief.
 - (2) No entry feature, other than screening walls or extensions of screening walls, may be constructed on any portion of a single-family, two-family, or townhome lot(s). All such features shall be constructed on lots that are platted as "non-buildable" lots and dedicated to a mandatory HOA for private ownership and maintenance.
 - (3) Entry features shall not encroach into visibility easements or otherwise impair pedestrian or vehicular visibility.
 - (4) The maximum height for entry features and structures shall be the maximum height of the governing zoning district, if applicable, as measured from the nearest street or sidewalk grade, whichever is higher.
 - (5) Private recreation facilities, if provided in a development, shall, to the greatest extent possible, be centrally located within the overall development. (See Diagram 8.10-1)

SECTION 8.11 HOMEOWNERS' ASSOCIATION (HOA) REQUIREMENTS

- (a) **Purpose.** The purpose for the establishment of an HOA (also referred to as "Association") for residential developments is to create an organization that owns and is responsible for maintaining, among other things, commonly owned properties, amenities, rights-of-way and riparian areas for the communal good of the development's property owners and residents.
- (b) **Applicability.** An HOA shall be established for any development that contains any of the following: an amenity, private street(s), a Major Creek or tributary, or thoroughfare screening. For purposes of this section, the terms "Homeowners' Association" and "Association" are interchangeable with the term "Property Owners' Association" for multi-family and non-residential developments.
- (c) **Descriptions of Elements Requiring a HOA.** Any one (1) or more of the following elements created as part of a development shall require formation and continued operation of a mandatory HOA:
 - (1) Amenity. Where proposed in conjunction with a development, the word "amenity" shall be as defined in Section 10.02, and shall include, but not be limited to, the following:



- a. Amenity center (i.e., private swimming pool, club house, tennis courts, etc.);
 - b. Private recreational facility;
 - c. Entry features;
 - d. Open space - voluntary or as required by zoning or Development Agreement;
 - e. Ponds;
 - f. Water fountains;
 - g. Water features;
 - h. Hike-and-bike trails; and
 - i. Other commonly owned facilities.
- (2) Major Creek. As defined in Section 10.02, and as generally regulated by Section 8.03 of this Ordinance.
- (3) Private Street. As defined in Section 10.02, and as generally regulated by Section 8.04(b)(5) of this Ordinance; this shall include all infrastructure including streets, alleys, sidewalks and other appurtenances within designated access easements, as well as associated structures as follows:
- a. Security station structures and equipment (including gates, access card readers, perimeter security fencing, etc.);
 - b. Greenbelts; and
 - c. Other infrastructure necessary for vehicular circulation and neighborhood security.
- (4) Thoroughfare Screening. As defined in Section 10.02, and as generally regulated by Section 8.06 of this Ordinance.
- (d) **Procedure**. The establishment of a required HOA shall occur in conjunction with the recordation of the subdivision Final Plat, and shall generally be established as follows:
- (1) Documents Submitted for Review. The Declaration, covenants and other necessary documents establishing the HOA shall be submitted to the City for review by the City Attorney for conformance with this and other applicable ordinances prior to submission of the Final Plat, and prior to issuance of a Letter of Final Acceptance for the development (refer to Section 5.05). HOA documents shall include descriptions of any amenities, private streets, stub streets, thoroughfare screening, Major Creek(s) or tributary(ies), and other areas for which the Association is responsible for maintenance, and shall outline the organization of the Association.
 - (2) Approval By City Attorney. All HOA documents shall be reviewed by the City Attorney prior to recordation of the Final Plat. The applicant shall reimburse the City for all related legal costs for review of the HOA documents. This reimbursement shall be paid in full prior to recordation of the Final Plat.
 - (3) Recordation. All HOA documents shall be recorded at the County prior to the recordation of the Final Plat. Two (2) copies of the recorded documents shall be submitted to Development Services for distribution to the Planning Division for City records within five (5) days following recordation.

- (4) **Additional Phases.** An additional phase to an existing subdivision is not required to establish a separate and distinct HOA, provided that:
- a. The existing, recorded Association documents are amended to incorporate the area of the new subdivision phase and to adopt the responsibility of its amenities, private streets, Major Creeks and tributaries, thoroughfare screening, and other areas for which the Association is responsible for maintenance.
 - b. The applicant shall provide a draft of the amended covenants to the City Attorney for review prior to the recordation of the plat.
- (e) **Notice to Purchasers.** The developer shall be required to post notice in a prominent place at all model homes and sales offices stating the following:
- (1) That an HOA has been established for the subdivision;
 - (2) That membership in the HOA is mandatory for all lot owners; and
 - (3) That the developer is required to provide to any person, upon their request, a complete copy of the Association documents and a five (5)-year projection (at a minimum), of Association dues, income and expenses.
- (f) **General Requirements.** The following shall be set forth in the HOA documents:
- (1) A statement that membership in the Association is mandatory for all owners of property within the subdivision;
 - (2) A listing of all required maintenance responsibilities, and where possible, the lot number(s), legal descriptions, street name(s), etc. as shown on the approved plat for areas to be the responsibility of the Association;
 - (3) By-laws related to the governance of the Association;
 - (4) Covenants for maintenance assessments, which shall run with the land;
 - (5) Responsibility for liability insurance and local taxes;
 - (6) Statement that the authority for enforcement of Association rules and regulations is solely the responsibility of the Association and is not, in any way, the responsibility of the City;
 - (7) Authority for the Association to secure funds from its members sufficient to meet its responsibilities. This authority shall include the ability to collect dues, to increase dues, to charge special assessments, and to place liens against property for failing to pay dues and assessments.
 - a. Dues shall be calculated based on a cost projection for the maintenance of all amenities and based on eventual build-out of the subdivision;
 - b. Dues shall not be based on calculations which include monies from the developer which will not be provided following the transfer of the Association from the developer to the lot owners.
 - c. Dues shall be required to be disclosed to all lot owners at the time of property purchase by the lot owners.



- (8) Provision that no amendment of the Association documents relating to maintenance of amenities, private streets, Major Creeks and tributaries, thoroughfare screening, any other Association-maintained area or facility, or related reserve funds (as applicable) shall occur without prior City approval;
 - (9) Written release of liability for maintenance to benefit the City; written indemnification of the City outlining that under no circumstances shall the City be liable to the Association or any property owner or their respective heirs, executors, administrators, devisees, personal representatives, successors or assigns for any damages, injuries (including death), and/or liability resulting from any amenity, on the private streets, within or adjacent to any Major Creek or tributary, associated with any thoroughfare screening or common landscaping, or from any other Association-owned and maintained area or facility;
 - (10) Written assurance of funds based on an accredited cost projection analysis within a specific reserve account of the Association for the maintenance and removal of amenities as determined by the City; and
 - (11) Written consent giving the City the authority to take the actions for violations as set forth in Section 8.11(h).
 - (12) Other City requirements as applicable.
- (g) **Supplementary Requirements.** The HOA shall also comply with the following regulations, where applicable:
- (1) Association documents shall not overrule the landscaping or other provisions of the Zoning Ordinance by penalizing or restricting water conserving landscapes, or by requiring landscape materials that do not comply with Zoning Ordinance landscape requirements;
 - (2) Amenities. The following regulations shall apply to any subdivision that includes an amenity, as described in Section 8.11(c)(1) (and defined in Section 10.02):
 - a. Where amenities are proposed in conjunction with a development, the applicant shall comply with those regulations outlined in Section 8.10 of this Ordinance.
 - b. All developments that require the provision of common open space shall submit covenants to maintain open space, recreational areas, and other commonly owned facilities for review with the Final Plat application.
 - (3) Private Streets. Whenever a public street becomes private following recordation, an HOA is required to be established, if not already in existence, that would be responsible for owning and maintaining the converted streets and rights-of-way. The following regulations shall apply to any subdivision that includes private streets, except those that exist as of the effective date of this Ordinance.
 - a. The Association shall own and be responsible for the maintenance of private streets and appurtenances (such as alleys, storm sewers, sidewalks, barrier-free ramps, street lights and signs, etc.) and shall provide for the payment of dues and assessments required to maintain the private streets and appurtenances.
 - b. The Association documents shall state that if the specific approval or the Specific Use Permit for the Private Street Development is revoked or the private streets are

otherwise converted to public streets, the reserve fund shall become the property of the City (see the City's *Thoroughfare and Circulation Design Requirements*, for conversion process).

- c. In addition to any other requirements set forth in this Section, the HOA's documents shall specify the following:
 - 1. That the streets within the development are private, that they are owned and maintained by the Association, and that the City has no obligation to maintain, repair or reconstruct the private streets.
 - 2. A statement that the City may, but is not obligated to, inspect private streets and require repairs necessary to insure that the same are maintained to City standards.
 - 3. A statement that the Association may not be dissolved without the prior written consent of the City Council, which consent shall not be withheld by the City if it determines that an adequate reserve fund exists, and the streets and alleys are in satisfactory condition as determined by the Director of Public Works.
 - 4. That failure to bring the subdivision into compliance with the regulations may cause the City to revoke the specific approval or the Specific Use Permit for the Private Street Development and take appropriate action.
- d. The HOA's documents shall note that certain City services may not be provided in Private Street Developments. The services that may not be provided include, but are not limited to: police enforcement of traffic and parking ordinances and preparation of accident reports. Depending on the characteristics of the proposed development other services may not be provided.
- e. The HOA's documents shall contain a provision that requires the Association to provide unrestricted access to emergency vehicles, utility personnel, the U.S. Postal Service, and governmental employees, agents or representatives in the performance of their official duties. All access gates shall be designed and constructed in accordance with emergency access design standards in the *Thoroughfare and Circulation Design Requirements*, and shall be equipped with an Opticom gate opening system or with another opening system that is acceptable to the Fire Chief.

(4) Major Creeks, Tributaries, Ponds and Water Features (100-Year Floodplain). For single-family and two-family residential developments, the 100-year floodplain may be owned and maintained by a Homeowners' Association subject to City approval. The Final Plat shall reflect, and the Association's documents shall provide:

- a. City access for emergency vehicles, equipment and personnel and for the improvement and maintenance of the 100-year floodplain in the event they are not being properly maintained, as determined by the Director of Engineering Services; and
- b. That the Association shall reimburse the City for all costs incurred by the City for maintenance.



(5) Thoroughfare Screening. All subdivisions that are required to provide thoroughfare screening per Section 8.06 of this Ordinance shall comply with the following:

- a. The Homeowners' Association shall own and be responsible for the maintenance of all required screening walls and fences, landscaping, landscape edges, and landscape irrigation systems, and shall provide for the payment of dues and assessments required to maintain such improvements.
- b. The Association documents shall state that the City has no obligation to maintain or reconstruct the screening walls and fences, landscaping, landscape edges, and landscape irrigation systems in the event of damage to such improvements.
- c. The Association documents shall state that the City may, but is not obligated to, inspect screening walls and fences, landscaping, landscape edges, and landscape irrigation systems, and that the City may require maintenance and repairs necessary to ensure that such improvements are maintained to City standards.

(h) **Violations, Revocations & Liens.**

- (1) The City will notify the Homeowners' Association of violations of any of the regulations specified within this Section.
- (2) Failure to bring the subdivision into compliance with these regulations may cause the City to revoke the specific approval of the Association or take other remedies as outlined in this Section 8.11(h).
- (3) The City shall have all lien, assessment and enforcement rights granted therein to the Association, and the City shall have the ability to enforce the liens and assessments, and avail itself of any other enforcement actions available to the City pursuant to State law and/or City regulations.
- (4) Should the Association fail to carry out its duties as specified in this Ordinance, the City shall have the right and ability, after due notice to the Association, to perform the duties required by this or any other Ordinance, regulation or agreement with the City in order to bring the Association into compliance therewith. The City shall have the right and ability, after due notice to the Association to assess the Association, for the full amount owed and/or assess the property owners on a pro rata basis for all costs incurred by the City in performing said duties if the Association fails to do so. Said assessment shall constitute a lien, in favor of the City, upon the property for which the assessment is made.

SECTION 8.12 PARKS & OPEN SPACES

- (a) **Applicability.** This section shall not apply to Major Creeks as set forth in Section 8.03 of this Ordinance, unless otherwise noted.
- (b) **General Requirements.** Parks shall be easy to access and open to public view so as to benefit area developments, enhance the visual character of the City, protect public safety, and minimize conflict with adjacent land uses. The following guidelines shall be used in designing development around or adjacent to parks and adjacent development:

- (1) Parks and Open Spaces. Parks shall be bounded by a street(s) or by other public uses unless otherwise specified in this Ordinance, the Zoning Ordinance, or a Planned Development (PD) ordinance (e.g. school, library, recreation center).
 - (2) Residential Lots.
 - a. Single-family and two-family residential lots shall be oriented such that they front or side onto parks and open spaces and they do not back to them, in accordance with Diagram 8.12-1.
 - b. Residential lots shall only be allowed to back onto a park or open space when the site's physical character (e.g., shape, topography, drainage) does not reasonably accommodate an alternative design or the layout of the subdivision complements the use of the park or open space (e.g., lots backing to a golf course); lots backing to a park or open space shall only be allowed upon approval from the Director of Development Services and the Director of Parks & Recreation.
 - (3) Access to Parks and Open Spaces. A proposed development adjacent to a park or open space shall not be designed to restrict public visibility or reasonable public access to the park or open space from other area developments. Street connections to existing or future adjoining subdivisions shall be required to provide reasonable access to parks and open space areas.
 - (4) Non-Residential Uses Adjacent to Parks. Where a non-residential use must directly abut a park or open space area, the use shall be oriented such that it sides, and does not back, onto the park or open space area if at all possible. The use shall be separated from the park or open space by a minimum six-foot (6') tall decorative metal fence with an irrigated living screen (see Section 8.06) unless otherwise approved as a Minor Waiver, in accordance with Section 9.01, by the Director of Development Services and the Director of Parks & Recreation. Access points to the park or open space area may be required by the City if a public benefit is established.
 - (5) Alleys Adjacent to Parks. Alleys should not be designed to encourage their use as a means of vehicular, bike or pedestrian travel to the park.
 - (6) Public Access Points Into Parks. Public access into parks and open spaces shall not be less than fifty feet (50') in width at the public right-of-way line, at the street curb, and at any other public access point (such as along Major Creeks, etc.). Such access shall not be part of a residential lot or other private property, and shall be kept open and unobstructed at all times.
- (c) **Streets Abutting a Park.** Streets abutting a park or open space area shall be built in accordance with the City's adopted *Comprehensive Plan*, the standards of this Ordinance, and all other applicable construction standards and/or ordinances. The City may, however, require any residential street built adjacent to a park or open space to be constructed to collector-street width to provide access, to accommodate possible on-street parking for park users, and to prevent traffic congestion.
- (1) Abutting Street Oversizing. When park or open space land is acquired by the City, the City shall require at least sixty feet (60') of right-of-way be dedicated to provide for an abutting collector-sized street, unless otherwise approved by the City.



- (d) **Park Reservation and Dedication.** Land for neighborhood and linear parks shall be reserved and dedicated in accordance with the locations recommended by the Parks and Recreation Board. All Preliminary and Final Plats shall be reviewed to determine if land dedications are necessary for neighborhood and linear parks. If land is required to be dedicated for park sites or open spaces, the City shall specify the proposed land requirements, configurations and locations. The Commission shall make the final determination of park land location and configuration during its review and approval of the Preliminary and Final Plats. Specific neighborhood and linear park sites and improvements shall be dedicated to the City upon approval of the Final Plat and upon issuance of a Letter of Final Acceptance (refer to Section 5.05).
- (e) **Site Criteria.** Neighborhood and linear park sites shall be of a suitable size, dimension, topography and general character to meet the design criteria specified in the *Parks, Recreation & Open Space Master Plan*.
- (f) **Minimum Park Improvements.** Unless waived by the Parks & Recreation Board, neighborhood and linear parks shall be improved by the developer prior to a Letter of Final Acceptance being issued by the City (refer to Section 5.05). Minimum park improvements, as determined by the City, shall include:
 - (1) Grading and clearance of unwanted vegetation, structures or improvements;
 - (2) Installation of storm drainage and stream erosion controls;
 - (3) Establishment of turf and planting of trees;
 - (4) Installation of perimeter streets and street lights; and
 - (5) Provision of water and sewer service to a location(s) on the park site as determined by the Director of Parks & Recreation and by the Director of Engineering Services.
- (g) **Additional Voluntary Park Improvements.** A developer may request permission to construct, at his or her own expense, additional park improvements. The City may accept or reject voluntary dedications of park land and/or additional park improvements. Such voluntary dedications and/or improvements shall be considered for approval by the Parks & Recreation Board. All improvements in public parks and open spaces shall be consistent with the design criteria and objectives of the *Parks, Recreation & Open Space Master Plan*, and shall, upon installation, become the property of the City. Prior to constructing such additional park improvements, the developer shall enter into a Development Agreement with the City that defines, among other things, the work to be performed, construction schedules, improvement costs, performance surety, the amount to be reimbursed by the City (if any), and the timing of such reimbursement (if any). The City's Parks & Recreation Board shall assess and submit its recommendation to the City Council, and the Council shall consider and decide the proposed Development Agreement for park improvements.
- (h) **Completion of Land Dedication and Improvements.** Park land shall be dedicated to the City concurrently with the filing of an approved Final Plat or Replat. All improvements specified in the Improvement Agreement, if applicable, shall be completed prior to approval of the Final Plat or Replat, except where future performance is provided for in the Improvement Agreement.
- (i) **Hike-and-Bike Trail Requirements.**

- (1) Hike & Bicycle Trail Master Plan. Hike-and-bike trails shall be constructed in accordance with the *Hike & Bicycle Trail Master Plan*.
- (2) Requirements. Hike-and-bike trails, especially those providing access to and along Major Creeks and other open spaces, shall be in accordance with the following design criteria (unless otherwise approved by the Director of Parks & Recreation):
 - a. A minimum twenty-five foot (25') wide, level ground surface shall be provided for a twelve-foot (12') wide public hike-and-bike trail, where required. The twenty-five foot (25') wide, level ground surface may be provided within and/or outside of the 100-year floodplain (refer to Section 8.03).
 - b. The parkway of a public street may count towards the twenty-five-foot (25')-wide, level ground surface, upon approval of the Director of Parks & Recreation.
 - c. Low water crossings for the hike-and-bike trail may be allowed upon approval from the Director of Engineering Services and the Director of Parks & Recreation.
 - d. The hike-and-bike trail shall be designed so as to minimize visibility blind spots from public streets for public safety purposes.
 - e. Construction Plans for the development (refer to Section 5.01) shall include engineered drawings of trail cross-sections in accordance with the City's *Engineering Design Standards and Construction Details*.
- (3) Locations. Locations of all trails shall be consistent with the locations designated on the *Hike & Bicycle Trail Master Plan*, and are subject to approval by the Director of Parks & Recreation.
 - a. The Director of Parks & Recreation shall have the authority to determine the placement of a public hike-and-bike trail at the time of Preliminary Plat review and approval.
 - b. The location of such trails shall be safe and economical.
 - c. No development shall interrupt future trail routes or otherwise hinder efficient public access to or from an existing or future planned trail. Gated and other limited access developments shall be designed such that they facilitate, and do not impede, through public access, emergency ingress and egress, usage and enjoyment of public trails.
- (4) Trails Along Major Creeks and Greenways.
 - a. The location of trails within developments adjacent to Major Creeks or greenway trails recognized on the *Hike & Bicycle Trail Master Plan* shall be coordinated with the Parks & Recreation Department, and shall be staked in the field by the developer and approved by the Director of Parks & Recreation prior to the submittal of a Preliminary Plat.
 - b. The location of the trail shall be specified on the Preliminary Plat as the approved location for the hike-and-bike trail, and an easement for such shall be shown on the Preliminary and Final Plats for any portions of the trail that traverse private property.
- (5) Trails in Relation to Golf Courses. When a trail system is extended through a golf course, improvements shall be made to protect and provide separation between users of the trail



system and the golfers, at the developer's expense. Such improvements include, but are not limited to, a series of berms and trees to help protect trail users from errant golf balls. Upon approval of the Director of Parks & Recreation, a golf cart path may serve as a trail.

- (6) Future Trails and Access for New Developments. When development is adjacent to an undeveloped property, a pedestrian access stub-out in conjunction with a street connection to the edge of the development (refer to Section 8.04(b)(9)) shall be required to allow for future access between developments.

SECTION 8.13 SUPPLEMENTAL THOROUGHFARE AND CIRCULATION DESIGN REQUIREMENTS

- (a) **Purpose.** This Section 8.13 is intended to be incorporated into the *Thoroughfare and Circulation Design Requirements* in the future.
- (b) **Street Off-Sets.** Where off-sets in street alignment are, in the opinion of the Planning & Zoning Commission unavoidable, such off-sets may be utilized, provided the distance between center lines is not less than one hundred twenty-five feet (125') for off-sets across undivided collector or local streets. Off-sets across existing or future divided thoroughfares shall be spaced as necessary to accommodate median openings and turn lanes.
- (c) **Dead-End Streets/Cul-De-Sacs.**
- (1) Turn-Arounds. Turn-arounds shall have a circular driving surface that has a minimum radius of fifty feet (50') and a street right-of-way that has a minimum radius of sixty feet (60').
 - (2) Maximum Length. The maximum length of a dead-end street with a permanent turn-around (i.e., a cul-de-sac) shall be six hundred feet (600'), as measured from the right-of-way line of the intersecting street to the center point of the turn-around circle, except in conditions of unusual topography or as may be approved as a Minor Waiver by the Director of Development Services in accordance with Section 9.01 of the Subdivision Ordinance.
 - (3) Temporary Turn-Arounds. Temporary turn-arounds and temporary turn-around easements, both of which meet the design criteria in Section 8.13(c)(1) above, shall be provided at the end of streets that will be extended in the future. The following note shall be placed on the plat: "*Cross-hatched area is a temporary easement for turn-around until street is extended (give direction) in the future.*"
- (d) **Partial or Half-Streets.**
- (1) Partial or half-streets shall be prohibited, except:
 - a. When essential to the reasonable development of the subdivision in conforming with the other requirements of these regulations, and
 - b. Where the Planning & Zoning Commission finds, upon Preliminary Plat approval, it will be practical to require the dedication of the other one-half of the street when the adjoining property is subdivided.
 - (2) Where part of a street is being dedicated along a common property line and the ultimate planned width is sixty feet (60') or less, the first dedication shall be thirty-five feet (35');
 - (3) Where part of a street is being dedicated along a common property line and the ultimate planned width is greater than sixty feet (60'), the first dedication shall be forty feet (40').

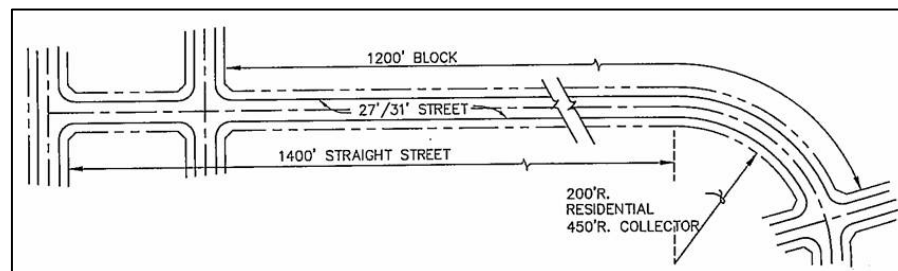


(e) **Private Streets.**

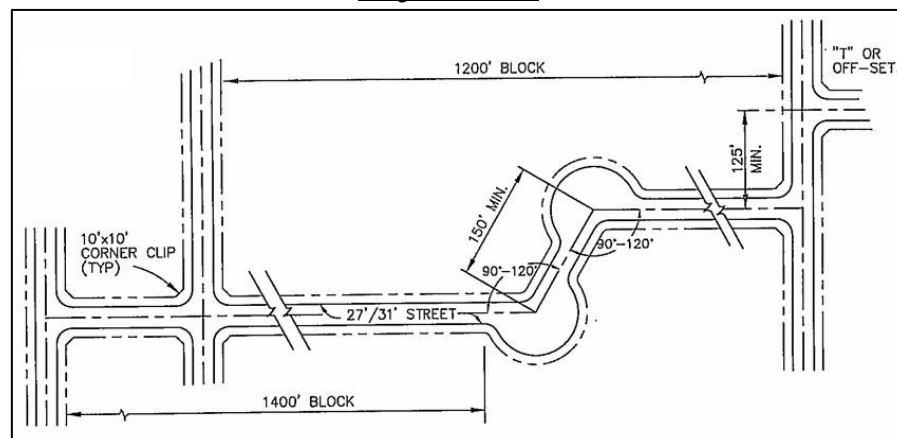
- (1) Reference Section 8.04(b)(5).
- (2) City Council Action Required. Dedicated streets and rights-of-way shall not be designated or used as private streets and such use is prohibited, except where specific approval is given by action of the City Council for properties within the City's extraterritorial jurisdiction and upon approval of a Specific Use Permit for properties within the City limits. The City Council may add any conditions as deemed appropriate as part of the approval of a Private Street Development.
- (3) Conversion of Private Streets to Public. The City may, but is in no way obligated to, accept private streets for public access and maintenance. Requests to convert Private Streets to Public Streets shall be subject to the following provisions:
 - a. The homeowners' association (HOA) shall submit a petition signed by at least sixty-seven percent (67%) of its members/lot owners (or a greater number of signatures, if required by the HOA documents or Declaration).
 - b. All of the infrastructure shall be in a condition that is acceptable to the Director of Engineering Services and the Director of Public Works.
 - c. All security stations and other structures not consistent with a public street development shall be removed by the HOA, at its cost, prior to acceptance of the streets and appurtenances by the City.
 - d. All monies in the reserve fund for private street maintenance shall be delivered to the City. Money in the reserve fund in excess of what is needed to bring the streets and appurtenances up to City standards will be refunded to the HOA. Private Street developments that exist as of the adoption of this ordinance are not required to deliver a reserve fund balance to the City.
 - e. The HOA shall prepare and submit a replat to Development Services for review. Upon approval, the HOA shall file the replat to dedicate the streets and appurtenances to the City.
 - f. The HOA shall modify and re-file, at its cost, the HOA documents to remove requirements specific to Private Street developments. The City Attorney shall review the modified HOA documents prior to their filing. The HOA shall be responsible for the cost of review by the City Attorney.
- (4) HOA Requirements. Private Street developments and the related HOA shall meet all requirements of Section 8.11 of this Ordinance.

(f) Street Lengths.

- (1) Reference Section 8.04(b)(8).
- (2) Residential streets with sixty feet (60') of right-of-way or less, excluding collector streets, shall not exceed a maximum length of six hundred feet (600'), measured from the major thoroughfare right-of-way, and one thousand four hundred feet (1,400') for all other residential streets that do not intersect a major thoroughfare without one or more of the following design elements:
 - a. A curve radius of two hundred feet (200'). Tangent between reverse curves shall be a minimum of one hundred fifty feet (150'). A one hundred fifty foot (150') offset shall be provided within the street when reverse curves are used. See *Diagram 8.13-1*.

Diagram 8.13-1

- b. An offset within the street between ninety (90°) to one hundred twenty degrees (120°). Minimum offset between reverse offsets shall be one hundred fifty feet (150'). See *Diagram 8.13-2*.

Diagram 8.13-2

landscape architect shall be installed with each tree. The homeowner shall be responsible for the irrigation and maintenance of the trees.

- (5) A collector street may exceed one thousand four hundred feet (1,400') provided that no residential lots front the collector street, and the collector street shall not have any straight sections exceeding one thousand feet (1,000').
- (6) Divided roadways are excluded from the street length requirement.

(g) Street Lighting.

- (1) Reference Section 8.04(b)(11).
- (2) Responsible Official. The Director of Engineering Services shall be the responsible official for the administration and enforcement of the provisions within this Section 8.13(g).
- (3) Major and Minor Thoroughfares. The following standards shall apply to all Major and Minor Thoroughfares:
 - a. Location. Streetlights shall be placed in the medians, with spacing not to exceed three hundred feet (300') and no closer than one hundred fifty feet (150'), depending on median breaks and intersections.
 - b. Function. Luminaires shall be designed to function as full cutoff type of luminary(s).
 - c. Type. Die cast aluminum or extruded aluminum with segmented internal reflector, 250-watt metal halide single or double head with davit arm black in color or approved equal by the Director of Engineering Services shall be used.
 - d. Style and Height. Poles are to be round tapered with a maximum height of thirty feet (30').
 - e. Timing. Thoroughfare lighting shall be installed prior to a Letter of Final Acceptance being issued by the City (refer to Section 5.05). When partial thoroughfares are constructed the Director of Engineering Services may accept escrowed funds in lieu of installing required lighting.
 - f. Responsibility. Where thoroughfares bisect property lines, each property owner (developer) is equally responsible for the complete cost of fully developed thoroughfare lighting.
- (4) Commercial Collectors. The following standards shall apply to all Commercial Collectors:
 - a. Location. Streetlights shall be placed in the parkway between the curb and sidewalk, with spacing not to exceed three hundred feet (300') and no closer than one hundred fifty feet (150').
 - b. Function. Luminaires shall be designed to function as full cutoff type of luminary(s).
 - c. Type. Die cast aluminum or extruded aluminum with segmented internal reflector, 250-watt metal halide single head with davit arm black in color or approved equal by the Director of Engineering Services shall be used.



- d. Style and Height. Poles are to be round tapered with a maximum height of twenty feet (20').
- e. Timing. Collector lighting shall be installed prior to a Letter of Final Acceptance being issued by the City (refer to Section 5.05).
- f. Responsibility. Where collectors bisect property lines, each property owner (developer) is equally responsible for the complete cost of fully developed lighting.

(5) Residential Streets. The following standards shall apply to all Residential Streets.

- a. Location.
 - 1. Light locations shall typically be at intersections and at mid-block if the block length is greater than six hundred feet (600').
 - 2. Cul-de-sacs over three hundred feet (300'), measured from centerline of street to center point of cul-de-sac, shall have a light installed at the street intersection and at the beginning of the bulb.
 - 3. Other locations may be required as deemed necessary by the Director of Engineering Services. Lights shall not be closer than one hundred fifty (150').
- b. Type. Luminaires shall be Acorn with refractive globes, metal cap and finial.
- c. Style & Height.
 - 1. Poles are to be round tapered, American style with Barrington base, black in color.
 - 2. Residential lights shall be installed without multiple luminaires.
 - 3. Subdivisions bounded by thoroughfares shall have common style and type of luminaires.
 - 4. Maximum height not to exceed twelve feet (12') for residential streets and fourteen feet (14') for collectors.
- d. Wattage. Lamp wattages shall be one hundred (100) watts high pressure sodium.
- e. Additions. The developer may install additional banding and/or medallions with prior approval from the Director of Engineering Services. The cost for maintenance and/or replacement of the banding and/or medallions shall be the responsibility of the property owner or Homeowners' Association (HOA requirements are outlined in Section 8.11).
- f. Timing. Lighting shall be installed prior to issuance of a Letter of Final Acceptance (refer to Section 5.05).

(6) Lighting Plan. A Lighting Plan shall be required anytime lighting is proposed or modified.

- a. Timing of Submission. The Lighting Plan shall be submitted to the Director of Engineering Services as part of the Construction Plans.
- b. Responsibility. A certified engineer, architect, landscape architect, lighting engineer or designer shall prepare the Lighting Plan. The Plan shall also contain a

certification by the property owner or representative and the preparer of the Plan that the street lighting depicted on the Plan complies with the requirements of this Ordinance.

c. Requirements. The submission shall contain but shall not necessarily be limited to the following:

1. Plans indicating the location of the lighting, and the type of illuminating devices, fixtures, lamps, supports, reflectors, and other devices;
2. Description of the illuminating devices, fixtures, lamps, supports, reflectors, and other devices and the description may include, but is not limited to, catalog cuts by manufacturers and drawings (including sections where required) and height of the luminaires;
3. Photometric plan and data sheets, such as that furnished by manufacturers, or similar to that furnished by manufacturers, showing the angle of cut off or light emissions;
4. Water and sewer locations along with any other existing utilities lightly shaded on plans showing any possible location conflicts with proposed lighting.

(7) **Exemptions.** The following are exempt from the street lighting requirements of this Ordinance.

- a. "Cobra head" type lighting fixtures having dished or "drop" lenses or refractors which house other than incandescent light sources in undeveloped areas.
- b. Temporary lighting approved in writing by the Director of Engineering Services.
- c. Where existing or phased subdivisions are currently under construction, the continued use of previously approved lighting will be allowed unless such lighting is considered dangerous, inadequate for public safety and security, or too costly for the City to maintain long-term. However, when divided by collector-sized or larger streets, the lighting standards contained in this Ordinance, the *Thoroughfare and Circulation Design Requirements* and the *Engineering Design Standards and Construction Details* shall be required for new portions of a development.
- d. Any public street and sidewalk project within an overlay district for which the City Council has varied these requirements as part of an approval of such project.
- e. Lighting luminaires in existence on the effective date of this Ordinance shall be exempt from these standards and shall be considered legally nonconforming. Such fixtures may be repaired, maintained and/or replaced. However, the replacement of non-conforming luminaires shall comply with this Ordinance and with design standards in the *Thoroughfare and Circulation Design Requirements* and the *Engineering Design Standards and Construction Details*.



(h) **Lot Layout and Related Street Widths.**

- (1) Single-family, two-family and townhome lot(s) shall not front onto, nor shall a garage or driveway face onto, a subdivision residential street entrance for the first one hundred feet (100') of the street frontage, as measured from the intersecting thoroughfare right-of-way line.
- (2) Single-family, two-family and townhome lot(s) shall not front onto, nor shall a garage or driveway face onto, a subdivision collector street entrance for the first one hundred and fifty feet (150') of the street frontage, as measured from the intersecting thoroughfare right-of-way line.
- (3) For additional lot layout requirements, see *Thoroughfare and Circulation Design Requirements*.

(i) **Block Requirements.**

- (1) Block Width. Blocks shall be wide enough to allow two (2) tiers of lots with a block width no less than two hundred feet (200'), except when prevented by the size of the property or the need to back up to a major thoroughfare.

(j) **Sidewalks.**

- (1) Escrow. When the delay of sidewalk construction is deemed appropriate due to future right-of-way or storm drainage improvements, escrow funds in lieu of the construction of sidewalks may be approved by the Director of Engineering Services. Also refer to escrow policies and procedures within Section 5.04(f) of this Ordinance.
 - a. Such funds shall be escrowed with the City prior to Final Plat approval.
 - b. If the tract has already been platted and filed, then the funds must be escrowed prior to final approval of a Site Plan.
 - c. The escrow amount shall be determined by the square foot cost of constructing such sidewalk with a reasonable inflation factor, as estimated by the developer and as approved by the Director of Engineering Services.
- (2) Sidewalk Assessment. The City may also elect to construct sidewalks before the development and/or subdivision of a tract of land. The City shall pay for the construction of said sidewalks, and construction shall be in accordance with the standards set forth in the *Thoroughfare and Circulation Design Requirements*. But, when the land abutting the sidewalk is to be developed or subdivided, the City shall assess the owner of that abutting tract of land for the cost of construction for that portion of the sidewalk abutting their tract of land. The assessment must be paid before any plat may be filed for the property. If the tract has already been platted and the plat filed for record, then payment of the assessment must be paid prior to final approval of a site plan. If no plat is required, then payment of the assessment must be paid prior to the issuance of any building permit. This amount of the assessment shall be determined by multiplying the City's square-foot cost of constructing the sidewalk by the number of square feet of sidewalk abutting the tract of land being developed or subdivided.